

POSTSCRIPT TO THE MONOGRAPH OF HIMALAYAN AND BARMESE
CLAUSILLE,—by DR. F. STOLICZKA.

(Received 31st July, 1872.)

(See plate IX.)

In looking through the proof-sheets of Mr. Blanford's paper, while they passed through the press, and comparing his descriptions with the specimens of Indian and Barmese *Clausilia* in my collection, I find that a few additions can be made to the Monograph. The new species are figured on the same plate, IX. I would have gladly handed over the additional materials to Mr. Blanford, but as he is now engaged on an expedition in Persia, and may not for some time return to Calcutta, I do not think it advisable to defer on that account the publication of these notes.

I have only to observe that I had an opportunity of comparing some of Mr. Theobald's original specimens, and have thus been enabled to add some information regarding the synonymy of one or two doubtful species.

1. *CL. CYLINDRICA*. (Ad p. 199.)

I have specimens of this species from near Tézpúr (Asám), and Dr. Waagen very recently brought one from near Marri; the geographical distribution of the species may, therefore, be said to extend over the whole of the southern slopes of the Himalayas, though its head-quarter appears to be about Nyin-tál, or near the centre of the range.

3. *CL. BACILLUM*. (Ad p. 200.)

This species varies considerably both in the form and length of the shell. The specimen figured may be taken as the type, but others longer and slenderer are quite as common, they very closely resemble *Theobaldi* in form, differing from it by their smooth shining surface. One of the most slender specimens measures: total length 15, thickness 3 mm.; it has 10½ whorls and is much attenuated towards the apex.

The representation in the 'Conch. Indica' must evidently be taken as that of true *bacillum*, of which, the authors of that work say, two specimens were known at that time: one in Benson's and the other in Theobald's collection. These are the two specimens to which Theobald (Journ. A. S. B., 1858, p. 321) refers under the name of *ignota*, as a provisional name, while the single specimen which he quotes l. c. as '*C. Bacillum*, B.' is a somewhat worn *Cl. Asaluensis*, and hence Theobald's reference that the species is of the type of *C. insignis*. I have carefully examined with Mr. Theobald his type specimens, and the question as regard the synonymy may be considered as settled; the species must stand as recorded by Blanford.

6. CL. LOXOSTOMA. (Ad p. 202.)

The typical specimens of this species are pale brownish or dull ferruginous, and nearly smooth or obsoletely striated. Together with these a white, solid variety occurs on the Khasi hills; in form it tolerably agrees with Blanford's fig. 6*b* (plate IX), some specimens are, however, still a little thicker, and the transverse costulation on all the whorls is very distinct, while the crenulation along the suture is generally not so coarse, as in typical *loxostoma*, though evidently stronger than in *Asaluensis*, which latter also differs by a more slender shape and smaller aperture. Although the above noticed form appears to be a well marked variety of *loxostoma*, the differences do not seem to be constant, and both shells unquestionably are of the same type. The crenulation on the two last whorls is often most regular, each alternate rib somewhat projecting into the sutural impression. In other specimens two ribs unite to a sutural tooth. The stronger or finer costulation, or striation, of the whorls appears to depend upon the character of the locality in which the specimens live.

I have added a figure (6*d*) of one of the shortest costulated varieties from the Khasi hills.

10. CL. GOULDIANA. (Ad p. 203.)

This also is one of the most variable species, both in colour and form. Young specimens are either brown or of a beautiful rosy tinge; older shells, after they become solidified, either retain the brown or pink colour, or the lip becomes yellowish brown or perfectly white; the 3-5 top-whorls are always white. The form differs from fusiform to highly turreted, as may be indicated by the following measurements—

a.	long. 23,	lat. 6,	long. apert. 5·2,	ej. lat. 4·2	mm.
b.	„ 28,	„ 6·3,	„ „ 6·2,	„ „ 5·	„ „
c.	„ 32,	„ 6·5,	„ „ 6·	„ „ 5·	„ „

All three specimens are from near Moulmain; *a* is almost exactly identical with Pfeiffer's original figure of the species; *b* and *c* are a white and a yellowish liped variety from Mr. Theobald's collection; *c* has an almost abnormally small aperture as compared with the length of the shell.

11 AND 12. CL. INSIGNIS. (See also fig. 12*a*; ad p. 204).

Mr. Blanford is of opinion that Pfeiffer's *insignis* is not the same as Gould's, but that it is identical with the form figured by Hanley and Theobald in the *Conch. Iconica*.

There is undoubtedly a slight discrepancy between Gould's original figure and description. He states the number of whorls to be 8 or 9, and the apex 'mamillated,' while the figure shews it shortly pointed; then again he gives 'length 1 inch, breadth $\frac{1}{8}$ of an inch.' The original figure (whether enlarged or not, it is not stated) represents a shell of 28 mm. in length and 7 in thickness; the second dimension is, therefore, only one fourth of the total

length, instead of one fifth; if the latter were the case, the shell would be an extremely slender one, and comparing it with *Gouldiana*, as a shell of the same type, I would prefer to consider Gould's figure as more probably correct, than his measurement. Now, allowing for these discrepancies in Gould's original statements, I am inclined to think that Pfeiffer's species is very closely allied to, if not exactly identical with, true *insignis*, but Hanley and Theobald's figures certainly seem to be somewhat different from both the preceding; however, they do not exclude the possibility of representing mere variations of one and the same species. Whether the form of the aperture in Gould's original figure is slightly exaggerated or not, I think the great expansion of the outer lip is decidedly somewhat abnormal, and setting aside this point the remaining differences between the shells figured as *insignis* are not greater than those between the different varieties of *loxostoma* or *Gouldiana*.

In order to clear up the matter more easily I add here (fig 12a) a copy of Pfeiffer's figure of *insignis*. I greatly regret that I have not got the opportunity of examining Mr. Theobald's two type specimens, figured in the *Conchologia Indica* as '*insignis*' and var. *gracilior*, but possibly I may be in a position to supply the deficiency in the next number of the Journal.

15. CL. VESPA. (Ad p. 205.)

The shell delineated by Mr. Blanford as a variety of *vespa* may be considered as a fair representation of that species; but I add a figure (15a) and description of a specimen obtained by Mr. Theobald at Tavoy, whence *vespa* was originally got, and which is undoubtedly Gould's species.

(15a). *Cl. testu ovato-cylindracea, ad apicem obtusiuscula, albida, medio subinflata, ultimo anfractu sensim attenuata, haud rimata, fusco castanea; anfractibus sex, convexiusculis, sutura simpliciter junctis, transversim oblique et confertissime striolatis; apertura subovata, postice rotundate subangulata, antice late sub-effusa, intus violacco rufa, peritremate modice expanso, interno oblique fere recto, libero, biplicato; plica antica, vel inferiore, valde obliqua, sub-immersa; plicis palatalibus novem tenuibus, supera longissima, circiter 1.2 m.m. a margine suturali distante, alteris brevioribus et inter se valde inaequalibus.*

Long. 24.6 m.m., *lat.* 7; *long. apert. cum perist.* 6.3, *ejusdem lat.* 4.8 m.m.

Although allied to *Phillippiana* the present form is undoubtedly quite distinct, differing from Pfeiffer's species by a more slender shape, smaller aperture, free inner lip, peculiarly flattened or almost canaliculated aperture on the anterior end, and by the larger number of palatal pliae.

19. CLAUSILIA WAAGENI, n. sp.

Cl. testa conoideo-turrita, corneo-fusca, apice obtusiuscula, sub-rimata anfractibus 11, paulo convexis, sutura simpliciter junctis, lateraliter api-

com versus paululum concava; omnis transversim oblique confertim costulato-striatis, ultimo antecedente vix latiore, prope aperturam costulato, basi paulum contracto, convexiusculo; apertura verticali, postice (vel supra) angulata; peritremate modice incrassato, vix expanso, albescente, antice recedente, interno soluto, antice rectiusculo, biphicato, plica postica (aut superiore) brevi, altera vix conspicua; lunella distincta, plica longa, tenuissima superposita, altera brevi, a terminatione supera lunelle haud separata.

Long. tota 18, diam. 4; long. apert. obliq. 4, ejusdem lat. 2.7 m. m.

Hab.—Changligalli, prope Marri, Himalaya occident., ad altitudinem circa 9000 ped. angl. detexit W. Waagen.

This is the most westerly known species of the genus in India. A single, but perfect, specimen was found by Dr. W. Waagen, together with *Cl. cylindrica*, under the bark of an old tree at the above mentioned locality. The nearest allied species is *Cl. Iōs*, but the larger size of the shell, comparative shortness of the two last whorls, larger and more straight aperture readily distinguish this new form.

20. *CL. ARAKANA*, Theob. (M.S.)

Cl. testa stramineo-albida, subfusiforme-turrita, apice attenuata, aperturam versus subangustata, non rimata; anfractibus 10-12, paulum convexiusculis, sutura profunda simplici junctis, transversim oblique capillaceo striolatis; apertura rectiuscula, sub-rectangulari, antice subrotundata, marginibus modice dilatatis et incrassatis, labio breviter libero, fere recto, biphicato, plica antica (seu inferiore) valde oblique intrante; plicis palatalibus quinque, fere æquidistantibus et inter se parallelis, supera longissima, cæteris subæqualibus.

Long. 17—20; lat. 3.8-4; long. apert. 4-4.4, lat. 3.3-2 m.m.

Hab.—In montibus Arakanensis et ad Mai-i in provincia Sandoway dieta detexit W. Theobald.

This is the new Arakan species to which Mr. Blandford alludes at p. 205, when speaking of *Cl. monticola*; it differs from this last by its more fusiform instead of conoidally turreted shape, its thinner texture, larger aperture and somewhat differently arranged palatal folds. I have given illustrations of a shorter form with ten whorls and of another with twelve whorls, the former is a single specimen from the hills S. E. of Akyab, the other was collected by Mr. Theobald at Mai-i in the Sandoway district. These two forms represent the extreme variations which were noticed among a large number of specimens.